

Amache 2018 Field School Summary

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From June 10 to July 14, 2018, crews of undergraduate and graduate students, high school interns, volunteers, and staff worked to further understand the material record of Amache, Colorado's WWII-era Japanese American confinement camp. For the first time, the University of Denver teamed with the Institute for Field Research (IFR) to bring in students from across the country. The project benefitted from the wide range of talents and expertise of the 30 participants in this year's field school, including nine students enrolled in the field course, ten volunteers and two high school interns from the Amache community, and a Granada High school intern. Crews were led by five full-time staff, as well as five visiting scholars who engaged the crews in specialized work, including training in oral history, filmmaking, and garden archaeology. The mornings were spent at the site itself, where crews conducted first intensive pedestrian survey, followed by ground-penetrating radar, and test excavations. We conducted survey in three different barracks blocks: 6G, 8G, and 9E. In addition, crews tested a garden in barracks block 11F, the location of the recently relocated Recreation Hall. In the afternoon, crews worked on managing the collections of the Amache museum, including continuing work on the off-site storage facility at the Amache Research Center.

During the field school we were visited by a number of Amache stakeholders. Some visitors were relatives of our crew, including Gary Ono, a former internee whose grandson Chava Ono Valdez served as one of our volunteers. Toward the end of the field school we held two very successful open house days. The first was geared to people with personal or family ties to Amache. The 45 attendees were given a chance to see ongoing archaeological research and then were led on tours of their family spaces in camp as well as the newly returned Rec Hall. The afternoon featured activities at the museum and the Granada Community Center (see below for more detail), followed by a group dinner (Figure 1). The next day was the public open house day, with a similar chance for visitors to see both the site and the museum. Some of our community open house attendees stayed that day, and they were joined by about 80 members of the general public.



Figure 1: Amache Community Open House participants including Amache field crew and site visitors. Eleven former internees were present and are mostly seated in this photo.

Museum Work

During the 2018 field school, students, volunteers, and interns were able to complete a number of projects in the Amache museum. This year also presented unique challenges working with a large group and in two locations during the museum time. Participants were able to complete a significant amount of work, particularly projects related to historical research and documenting the current state of the museum. The following is a general summary of the work completed and activities that volunteers, students, and interns participated in throughout the summer.

After a general introduction to museum studies and the history of the Amache museum, participants learned about museum object registration and accession processes. To practice the process, they filled in object record forms and paper copies of the museum collections (Past Perfect) database for the Ewing kimono collection. Participants used knowledge gained from this experience to further process new collections that the museum had acquired and continued to acquire throughout the summer. Museum Coordinator Anne Amati also worked with some of the participants to teach them about making museum storage boxes, which were created for new collection items.

Overall, there was a general focus on conducting inventories to assess the current state of the museum, creating finding aids, as well as conducting research. Students identified the location of objects at the Amache Research Center and Amache museum and added this information to Past Perfect. Participants worked hard to make sure other aspects of the database were up to date. One volunteer photographed new objects as well as past donations that were missing photographs in Past Perfect. Over the course of the summer, the group processed all donations and items that the museum had acquired throughout the last two years.

A major project that students completed was an inventory on the Robert Fuchigami collection, loaned to the Amache Preservation Society in 2017. In addition to the inventory, they wrote a summary of everything in the collection, paying special attention to which items were historic or original documents and which were copies. They also noted if copies of resources were already at other institutions and what copies were from individuals' personal collections. Another project beneficial for both the museum and archaeological work consisted of students identifying specific places at Amache shown in historic photographs curated at the museum. This information will be useful for visitors who have family connections to specific places on the site, as well as providing insight for the archaeological work throughout the site.

After training in oral history by visiting scholar and DU alum, Dana Ogo Shew, students and volunteers conducted and processed four interviews with museum donors and/or people who were incarcerated at Amache. They also researched pre-existing oral histories, pulling out quotes and organizing them in themes that could be used in the future. A small group of students and volunteers also gathered a significant amount of information about agriculture at Amache and its impact on the local community, contributing to an exhibit draft.

While there was less focus on permanent changes in the museum exhibits, a number of students created children's activities that kids can do in the museum. Other projects focused on more general visitor services such as making a site map to orient people to newly constructed buildings, a sign about donations to post on site, a handout about donations to give people in the museum, and a compilation of resources to give people who were incarcerated at Amache or have family connections to the site.

Both open house days were a success. Students contributed to the open house days through sharing many of the individual projects they were working on such as translating items in the collection written in Japanese, facilitating children's activities, and discussing the processes involved in developing the exhibit on agriculture. Given the limited interaction students had with visitors throughout the field school, the open house days provided an opportunity to see how their work contributed to community engagement.

Participants not only learned about museum work, but also how this work contributes to the larger goals of preservation and education related to Japanese American WWII incarceration. While completing certain collection management tasks proved challenging with the busy summer, the group made progress in both maintaining and finding ways to sustainably build upon the current state of the Amache Museum.

Ground-Penetrating Rader and Test Excavation of Amache's Landscape

As part of ongoing research on the gardens and landscapes of Amache, and to aid in the continued preservation and restoration of the 11F Rec Hall, we pursued investigations in the vicinity of the recently returned building. We began by re-establishing the boundaries of the previously recorded garden feature south of the building. Then we proceeded with a ground-penetrating radar (GPR) analysis of the areas likely to be impacted by future building stabilization or that were of interest to our research on gardens. Ground-penetrating radar uses electromagnetic energy to detect and map in three dimensions features below the current ground surface. At Amache, differences in how the energy reflects back to the surface (or amplitude) often suggest areas of human activity now buried by the active, sandy soil of the site. A total of three GPR areas were each collected in a grid pattern (Figure 2).

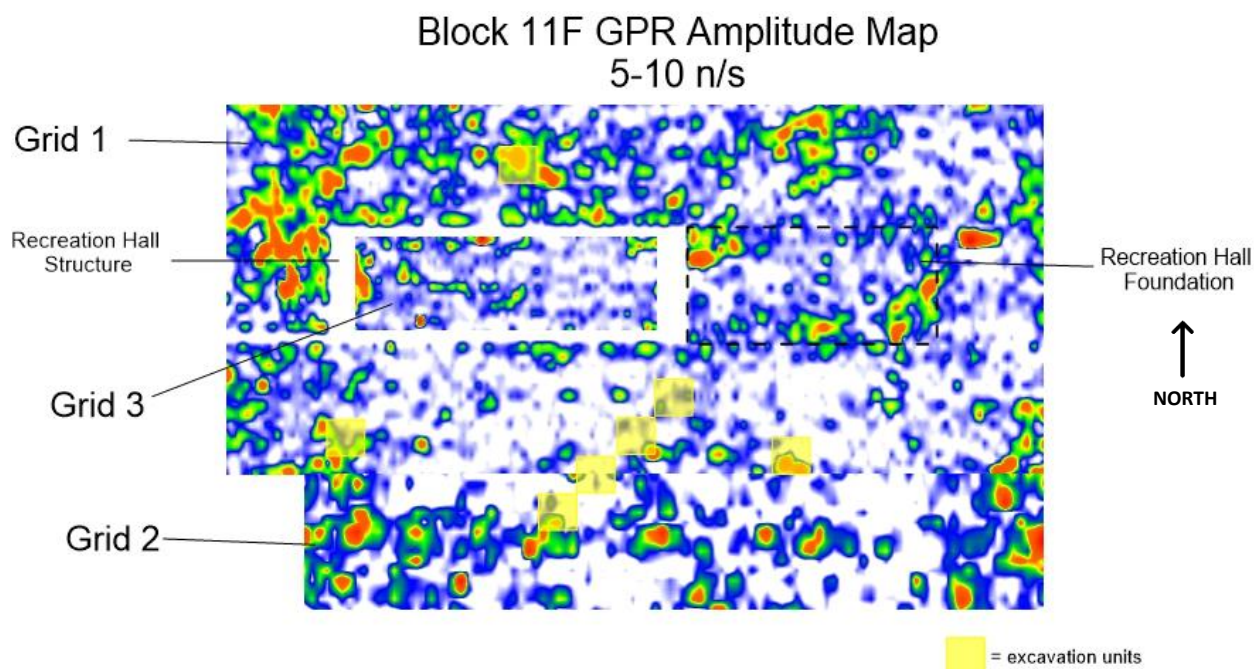


Figure 2. Amplitude map showing the three GPR grids combined and the 2 x 2 m excavation units in reference to the Recreation Hall building and location

Grid 1 covers an area 6 meters beyond the foundation of the original recreation hall, as well as the interior of the foundation outside of the truncated historic building. The size of the grid was determined by two factors. On the south side of the recreation hall, this area contained surface evidence of landscaping, in particular, a tree stump and aligned depressions suggesting other tree locations. The area north of the structure is sloped upwards, causing sediments to constantly erode towards the historic structure. GPR investigations in that area were performed prior to likely grading of that surface to protect the building. In conversation with the historic architect for the project, we also hoped to better understand whether or not the area north of the building had once housed a retaining wall for holding back the sandy sediment.

After the completion of Grid 1, it became apparent that the landscaping associated south of the Recreation Hall was likely more extensive than originally thought. Thus, we conducted additional GPR in Grid 2 which spanned the gap between the original grid and the foundation of Barrack 6. This area was of interest in that it was a shared space, a place whose design and use must have been negotiated between the public goings-on at the recreation hall and the living quarters directly south of the building. Running through the center of the grid are a series of high amplitude reflections, showing areas where the landscape has been impacted in the past.

Grid 3 was collected within the internal structure of the recreation hall. High amplitude reflections show areas where activities most frequently occurred within the structure. Hiding holes or small pits were sometimes placed within architectural structures for storage of food or personal goods. While no significant signs of such storage units were detected using GPR, the high amplitude reflections did show areas where human activity most often occurred. These active locations can be seen in profiles as areas of highly dense packed surfaces in areas where one would expect them: near doorways and through the center of the structure. This goes to show that GPR may not always locate buried materials or distinct features, but rather can be a tool to map the movements of human activity within a place.

An excavation grid was established using the 11F GPR grid as a baseline and designated 800mN/800mE. Within that grid we excavated seven 2 m by 2 m test units, a unit size more often employed in garden settings (refer to Figure 2). Some of these areas were chosen because they included areas that the GPR indicated might contain a gardening-related feature. Others were chosen based on surface evidence of gardening (such as proximity to tree plantings or likely hardscaping). In addition, some units were chosen to reveal the landscaping that might be present between two areas of interest. Because there were no surface or GPR indications of likely significant buried features within Grid 3, no excavation units were placed within the relocated recreation hall.

In addition to the landscaping-related features, one area north of the recreation hall, central to the present structure, was selected for excavation due to high amplitude reflections visible in the slice map and stratigraphic variation identified in the subsurface profiles (Figure 3).

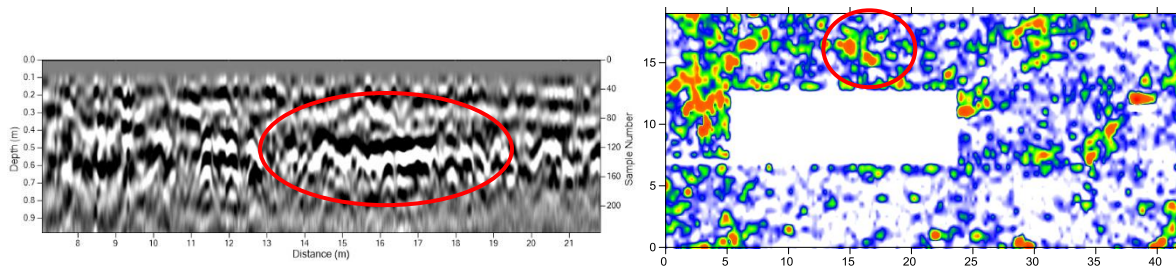


Figure 3. Reflections from a packed surface at a depth of roughly 40cm as noted both in profile (left) and plan view (right).

Single Excavation Units:

801N/805E: This unit was chosen for excavation because GPR suggested it might have a compacted soil layer. It is also just south of the former location of a tree (as evidenced by a depression with tree limbs). Excavation revealed several ashy features interlayered with clean soil. Excavators also encountered a round-ish feature (Context 028). The interior fill was more brown than the surrounding sediment perhaps due to decayed organic matter either from a planting or a post. The feature was relatively shallow, however, so excavators may have captured only the bottom of the feature. The placement of the feature was also intriguing: it at a right angle from the south edge of the recreation hall. That alignment seems unlikely to be accidental, but might reflect an “entrance” to the landscaped area between the two structures. A large wooden post of about the same diameter is located on the surface of the site nearby.

800N/828E: This unit was chosen in part due to a relatively high amplitude GPR reflection. We also wanted to reveal evidence of how the space toward the eastern end of the recreation hall was used. A few pieces of limestone, concrete, and cobble were recovered which might have to do with landscaping. More definitive evidence of landscaping was recovered from the south wall, where a piece of dimensional cedar lumber was found in the side wall.

815N/814E: This was the only unit laid out north of the recreation hall. As noted above a very strong GPR reflection was identified in this area. As excavation proceeded, it became clear that the reflection derived from an intensive coal pile. In some areas of the unit, very large pieces of coal were still present. In others, the excavation revealed finely crushed and compacted coal fragments, likely what had been left behind after the final pieces of coal had been used. The entire area current has a significant slope running to the south and the excavations revealed that the same was true of the historic ground surface. We continued to excavate below the coal pile at its southern edge to see if any evidence for a retaining wall could be discovered. None was found, nor did the coal that remained indicate it was leaning against such a wall (It was only a single layer deep). It is striking how clearly the GPR amplitude differences are the result of the coal pile (even the rodent hole down the center was evident).

The Lily Pad:

Four contiguous units were laid out in the area between the recreation hall and Barrack 6. These each were connected at one corner and created a sequence of units intended to reveal garden design and landscape use. Because of their visual resemblance to a series of lily pads, crews referred to them by that nickname and we honor that here.

797N/816E: This unit had a high amplitude reflection in the GPR. It was also located nearer Barrack 6 than the other units and it was hoped it would illuminate landscaping practices closer to the Barrack. The initial levels contained hundreds of nails and they might be the source of the GPR reflections. Chunks of cement, river cobble, brick and eggshell were encountered. Just as the unit was about to be closed, excavators located two pieces of wallboard near the bottom of the unit. We suspect these might have derived from the construction of the adjacent barrack, rather than its deconstruction. How it became so deeply buried is still unclear. A hint that landscaping continued to the south of this unit came from a piece of dimensional cedar lumber brought into the unit through a rodent hole in the western corner of the south wall.

799N/818E: This unit was chosen because it was near a piece of concrete that appeared to be part of the area's landscaping. The unit revealed scattered deconstruction and likely some landscaping materials, but no features or artifacts of note.

801N/820E: This unit contained gravel that was visible on the surface, as well as a high amplitude GPR reflection in its southwest corner. A consistent gravel level was uncovered near the surface, but no other features or artifacts of note were revealed.

803N/822E: This unit was intended to continue the diagonal line established with the other units in the "lily pad," extending it north toward the recreation hall. Unfortunately, we were only able to clear the surface and excavate a few cm of sediment before crews were required elsewhere. The unit was closed before it could reveal much, but several large pieces of limestone and concrete were recovered which may have been related to garden design.

GPR & Excavation Summary:

GPR is one of many tools archaeologist can use to investigate the subsurface and make inferences on activities that may have took place upon, and within, that landscape in the past. In conjunction with surface manifestations, oral histories, and archival records (including photographs), GPR can function as a means to direct excavations. At Amache, it is a powerful tool to make sure excavations are well-targeted and that the majority of the buried deposits at the site can be preserved for the future. As a planning tool it is very important, because it can also help investigators to efficiently clear areas for site development without full excavation.

Test excavations near the Recreation Hall in 11F led us to better understand areas where the deposits are likely to be impacted in the future and also landscaping practices at Amache. Perhaps most striking is the clear evidence that the landscape modifications near the Rec Hall were not outwardly-focused. In some Blocks (11H is a good example), garden features were placed in areas where passers-by would see and appreciate them. It is striking that although the Block 11F Rec Hall was just south of the Amache ball fields, the area that would have been visible by from fields was not landscaped. Rather it was the location of at least one work space—the Rec Hall coal pile. It seems that display was not a primary concern in this Recreation Hall landscape. Another answer may come from the archival record of camp. Carlene Tanigoshi Tinker served this summer for the fifth time as a volunteer with the Amache Field school. Records she found in the National Archives indicate that although she lived in adjacent Block 11G, she had attended pre-school in the 11F Rec Hall. By focusing their landscaping (especially tree-planting efforts) on the south side of the building, the 11F gardeners would have provided shade for a

structure that--at least part of the time--would have been filled with young children from not just their own, but also nearby blocks.

Another important finding was about the extent of landscaping on the south side of the building. From surface evidence it appeared that the area immediately adjacent to the Recreation Hall was the primary focus. Excavations revealed that the landscaping was far more extensive and likely spanned the entire area between the Rec Hall and the adjacent barrack to the south (Number 6). Indeed, as evidenced by the pieces of landscaping cedar found in the southernmost excavation units, the landscaping also intensified towards the back of Barrack 6. Little in the way of hardscaping in this area is evident, so it is hoped that laboratory analysis of garden samples will help us better understand this park-like area of Block 11F.

Surface survey

Blocks for the 2018 field season were selected to meet the dissertation research needs of co-field director April Kamp-Whittaker. Each residential block at Amache has a different demographic composition that may have influenced how residents interacted and the types of modifications made to the built environment. Blocks 6G, 9E and 8G were selected for survey because residents came from a mixture of urban and rural communities and there is not a single community that dominates the block. Block 6G was previously surveyed in 2008. It was the first block surveyed at Amache as part of the University of Denver Amache Project. Subsequently some of our survey procedures and ability to identify important artifacts or landscape features changed. Thus we made the decision to re-survey Block 6G.

Both 8G and 9E were not surveyed in prior field years in part due to questions about their physical integrity. There are three main causes of disruption to the historic Amache landscape: the 1945 removal of the barracks which in some cases involved heavy equipment, the removal of some foundations at a later date to serve as rip-rap for flooding along the Arkansas (which occurred in some of the westernmost blocks--those with an E designation), and finally the erosion and accumulation of sediment caused by the dune like nature of the area where Amache was constructed. However, reconnaissance survey suggested that both of these blocks retained enough physical integrity to likely yield important data.

Block 6G

Block Overview

Block 6G is located on the north end of Amache next the main entrance into the site and the administrative area. To the East is 6H, where the town hall was located, and the hospital. The block contained the YWCA hospitality house located in the recreation hall. Residents of 6G were from a range of communities across California, although a slight majority were from the LA region. The landscape of the block is relatively flat and the integrity is good. There is a moderate area of disturbance on the east edge where a large water storage tank was constructed after the site was purchased by the city. The tank is still being used and the area has been lightly graveled.

We initially surveyed the block in 2008 during the first year of the DU Amache Project. It was the very first area of Amache that was surveyed and that process helped us change and form how we would survey other parts of the site in subsequent field seasons. Based both on the demographics of the block and changes to the survey protocol we decided to re-survey 6G. We wanted the data to help with dissertation research but had two additional research questions. 1. How much are artifacts moving

around on the site? 2. Would we be able to identify more landscape and cultural features now after working at Amache for 10 years?

Survey

Artifacts:

During the 2008 field season we documented the location of artifacts that were assigned an FA number and collected 3 artifacts which are held in the Amache collection at the DU archaeology lab - a spoon, a piece of porcelain, and a barrel hoop wrapped in wire. The distribution of artifacts from both the 2008 and 2018 seasons is unremarkable. There are a few areas with slightly higher densities, like along the north edge of the block, the west side of the mess hall, and near a foundation that appears to have once held an ofuro, or traditional Japanese-style bath. Despite these slightly higher densities, overall the distribution of artifacts is uniform. The composition of the artifacts also does not present any clear patterns at this time. Most notable is the relative absence of some common artifact types. We did not find many modified artifacts and only recovered 1 marble during survey. The most unique artifact are two barrel hoops wrapped in wire. This is the only block where this artifact has been found. Overall the picture presented by the initial analysis of the 2018 survey is of a fairly standard residential block with a relatively normal distribution of artifacts and a slightly higher than average number of gardens.

Features:

During the initial survey we found 3 gardens, a trash dump, and one feature that we partially excavated and based on later knowledge now believe was an ofuro. The number of known features has increased significantly during the 2018 season: we now have identified 24 landscape features. These include 20 gardens, a sidewalk that runs along the north and west side of the block, the ofuro, a trash filled manhole, and a concrete pad in front of the mess hall. There is also an extension built on the mess hall. Finally, we decided that one of the features identified in 2008 as a trash scatter was not really a feature but probably more a moderately dense trash scatter. This initial data indicates that our abilities to identify landscape features have improved in the 10 years since we first surveyed the block.

The area around the mess hall had a number of landscaping features. Along the front of the mess hall is a rectangular addition one side of which is filled and the other excavated. This addition was constructed by residents of the block and acted as an extension of the mess hall. It is probable that the sunken section was used as a basement or semi underground storage. A concrete pad was constructed in front of the mess hall and was probably used to move food and materials in to the mess hall. Two gardens lined either side of the mess hall and one was located behind it. The bathhouse also had a washing feature on the north side and a garden behind between the bathhouse and the ofuro. These all represent examples of communal features. They would have been constructed, maintained, and agreed up by most residents of the block and probably provided areas for people to socialize. The existence of these landscape features also improved the livability of the block.

The twenty residential gardens we found serve a similar purpose. Although these are private they would have made the appearance of the block much more attractive. Based on our survey almost every barrack had a garden that ran along part or all of its length. These gardens are overall not remarkable but there are at least two exceptional examples. One has what appears to have been a small pond or water feature and the other has a much larger concrete element that formed a small wall. Today there is not much evidence for the extent of the landscaping that occurred in block 6G but when you stop and imagine what all the gardens would have looked like originally it changes your perspective on the block.

Block 8G

Block Overview

Block 8G, another barrack block, is geographically central within Amache's landscape and bound by blocks with high social activity. Bordering the east of 8G, in Block 8H, was the elementary school and Terry Hall. Cattycorner, in Block 9F, was the police station and the co-op. The block directly north of 8G was an empty lot. Most of the concrete foundations for the barracks are not visible and are either obscured by later soil deposition or were removed in the past. However, the pads for the mess hall and bath house remain in their historic locations and are very much intact. Many of the artifacts and features recorded in the survey of Block 8G indicate a balance between play and privacy, thus defining the personality of the block. This goes to show the innovation and negotiations that took place to create a space that could exist as a residential neighborhood and an area where movement along its borders was frequent, especially with the elementary school in the block next door.

Survey

Artifacts:

The 2018 survey of Block 8G revealed a wide variety of artifacts across the landscape, with concentrations around the public spaces of the mess hall and bath house, along its northern and western borders against the road, and a trash deposit behind the bath house. The team surveying the block noted several themes that appeared through the materials left behind that included "play", "privacy", and "innovation", those themes are expanded on below. Over 80 artifacts were marked and analyzed as Field Artifacts or FAs. Additionally, hundreds of fragmented artifacts, predominately broken glass and dishware, were tallied and georeferenced to show spatial distribution across the landscape. The artifacts located on Amache's present soils are remnants of the past that show how humans adapted to a foreign landscape utilizing what limited resources were available.

With the elementary school in the block bordering the eastern edge of 8G, the evidence of "play" can be seen throughout the block. Several marbles were recorded in 8G's survey, most being found near the trees of the mess hall and the northwest corner of the block. Marbles was a very popular game among groups of children. A white shell go token (Figure 4) was discovered near the mess hall along the north edge of the block. The evidence of marbles and go tokens shows that groups of individuals, both children and adults, were participating in interactive social activities together. Finally, two glass toys, a ship and a train, were also recorded. With some archival research, both glass toys were found in a period Sears Roebuck catalog. They would have originally been filled with candy.



Figure 4: Go token (on left) and marble indicate games were popular in 8G.

Social activity and movement around and through Block 8G would have been continual, therefore “privacy” of 8G’s residence would have been at risk. Artifacts, and features, recorded in survey documented the improvisation of security. One especially interesting find was the use block glass in the bath house. The block glass contained the partial makers mark of the word “National”, possibly indicating the company who produced it. The block glass may have been a modification to the bath house, which may indicate the glass was procured and installed by the residents of the block.

“Innovation” is a third theme, and a central theme to many artifacts modified at Amache, noted in the survey of Block 8G. An object of intrigue is concrete filled can that resembles a mortar used for the grinding of edible material was in a trash dump behind the bath house. This innovative repurposing of available resources, such as a used tin can, shows the creative measures that were taken to construct functional tools.

Features:

A total of 21 features were recorded in Block 8G, all being garden/landscape features (Figure 5). Evidence of the garden features can be identified on the surface from trees (especially in linear patterns), limestone, river cobbles, asbestos pieces, and concrete fragments. The first four features are located surrounding the bath house and mess hall, social areas. Feature 5 is located at the northwest corner of the block and includes the presence of several trees and a sidewalk. The remaining features are barrack gardens between residential structures. Because 8G is located geographically between blocks of high social activity (the elementary school to the east and co-op/police station to the southwest), movement along its borders and through the residential area would have been frequent. The identification of gardens across the landscape might have also contributed to block privacy, as well as improvements for the residents of the block to enjoy.



Figure 5: Concrete and river cobble used to construct a garden feature.

Features 1-4 were recorded in the areas around the bath house and mess hall. Feature 1 is located on the south end of the bath house. This garden feature includes the presence of several trees, limestone scatters, river cobbles, and a pond. Feature 2 is a garden located within the inset of the bath house, along the eastern edge. Because of the higher frequency of movement to and from the elementary school to the east, privacy would have been jeopardized. Features 1 and 2 show that external means, in the form of gardens, were taken to give the bath house more security from the passing public eye. Features 3 and 4 run the eastern and western edges of the mess hall and are noted by the row of trees that exist today.

Feature 5 is located in the northwest corner of Block 8G. This area would have been frequently traveled by, either heading to the elementary school to the east or the co-op/police station to the southwest. Several trees, which have now grown to a substantial height, stand in a line along the western border of the block. Limestone scattered between the trees and the road, in addition to raised berm, indicate the existence of a sidewalk that runs the length of the western edge of 8G. Evidence of the social nature of this location include artifacts of broken glass bottles and several marbles, all found under the shade of the arbor umbrella.

Features 6-21 are garden features between barracks. Historic photographs from Amache show that gardens between residential structures were popular across camp. They served to give character and comfort to the high desert prairie landscape.

Block 9E

Block Overview

There's more to block 9E than meets the eye. This block sits at the far west edge of the camp, with roads flanking west and southern edges. To the east is the Co-Op block (housing also the police department, and the relocation information bureau). To the northeast Block 8F (location of the recreation office and baseball field). To the north is block 8E (where Masaki "Sam" Nakashima who took 16mm home movies lived).

Survey

Features:

On both the east and western sides there are depressions extending the length of the block. On the west it is unclear whether the ditch was dug during or post occupation to help with water run-off. On the east it appears that the depression is created by the use of the edge of the block as an "alley" (according to Mas and Cookie Takano's account, see below.)

The terrain of the block slopes significantly from the east to west, with western barracks dug into the slope and eastern barrack foundations built up and filled with dirt. This makes the block seem as if it does not have good preservation because the western block foundations are completely invisible and on the eastern side are cracked, crooked and/or buried. Originally we suspected that the foundations on the western side had been pulled out to be used as riprap when the Arkansas flooded post-occupation of the camp. However, after survey we suspect that some of the western foundations may remain and are buried by the highly mobile sand of the area accumulating on top of them. This may have in fact created a condition of excellent preservation for gardens and other features.

Block 9E housed residents from all over California, making it an especially interesting place to think about how new communities formed that included people from many different backgrounds and experiences (a key aspect of this year's research design). To that end we identified many "communal" features that would have to have been negotiated among all residents if not built by collaborations of them. The first is a large Mess Hall and Kitchen garden which runs the western side of the building. For this feature we also have a photograph of Mako Hashioka Kanazawa and her parents (Genichi and Nobu Hashioka) standing in front of the kitchen which shows trees, plantings, limestone-lined garden beds, and brick drains consistent with what we find on the surface in that area today (Figure 6). In 2012 during a visit to the site, Mako recalled this garden, as well as her father's job in the kitchen (mostly to keep the flies out). The feature also runs into a trash scatter at the southern end of the mess hall as well as possible retaining walls that might also have included garden features along the south and east edge. The Bath house to the north also exhibits garden and retaining wall features.



Figure 6: Mako Hashioka Kanazawa and her parents (Genichi and Nobu Hashioka) standing in front of the 9E mess hall/kitchen garden.

In the western barracks we also see evidence for gardens (most likely personal) and significant retaining wall constructions (most likely communal). Mako remembered people being able to look down from above into her family's windows in unit 12F and that her barrack was "half underground." In a photograph of Barrack 7 a wooden stairway, planter boxes, and retaining walls are all visible, some evidence of which remain. Other barracks on the western side also evidence retaining wall features. The most obvious of these is Barrack 10, which has broken concrete slabs arranged to reinforce the corners.

Cookie Takano Takeshita and Mas Takano visited during community day in block 9E at this barrack (Figure 7). They talked about their experience here in a barrack dug into the ground (Unit 7B), with drifts of snow blocking the door, and having to trudge up and down to the bath house to fetch water to

maintain the lawn their father, Yasutaro Takano, planted to the left of their apartment door (Figure 6). Here we were also told of a “tea house,” or gazebo, built by the four families at the end of Barracks 7 and 8 (Yoshiwara, Masuda, Oka, and Takano according to the 9E block map). No evidence remained on the surface, but there was a mound where Cookie and Mas suggested the gazebo had been, and a clay marble and a few other artifacts were found in the vicinity. They both remembered the men of the four families gathering in this structure to smoke after a long day of work, and occasionally others (presumably women and children) drinking tea there.



Figure 7: Cookie and Mas Takano stand in front of their Barrack with a picture of themselves and their parents in the same location.

Features associated with the eastern barracks were harder to identify, consisting mostly of limestone scatter and some concrete alignments. These became more and more clear after rains began, which was unfortunately after a majority of the features were surveyed. A large concrete block with embedded glass and half a teacup underneath it was not recorded, as was a possible circle of concrete blocks at the eastern end of barrack 3. A photograph taken from between barracks 5 and 6 (directly east of Barrack 7) shows the significance of the slope, with Barrack 8 half visible in the distance (Figure 8). It also shows some kind of wooden backstop feature at the end of the bath house and a number of trees, fences or posts, and a bonsai plant in a tin can. Interestingly Barrack 6 appears to be dug into the ground (the coal bin along the side of the barrack is at the same height as the ground surface between the barracks) but Barrack 5 is not.

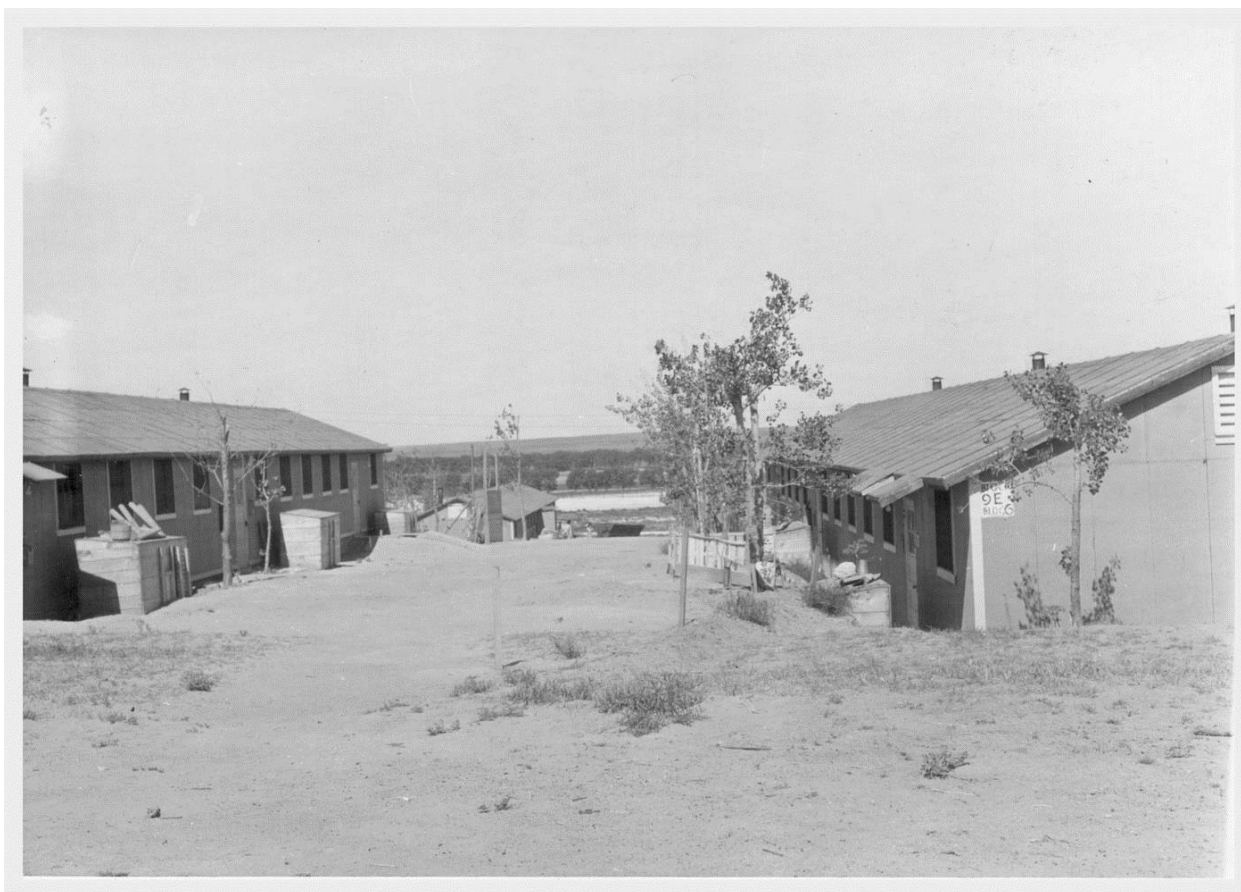


Figure 8: Barrack 6 in 9E (right) shows retaining wall features, trees, fencing and a bonsai plant (on top of coal bin in foreground).

Beyond the eastern row of barracks, a short square pedestal comprised of concrete blocks and mortar suggests that there was a fence demarcating the boundary between block 9E and the alley. Only one pedestal was identified but features along the embankment to the ally support the interpretation this boundary was marked by internees.

Artifacts:

Artifacts by and large followed similar patterns as other blocks. Aside from a concentration of artifacts at the end of the Mess Hall, most spread out around the communal buildings and dissipated in the residential sections. Significant artifact finds include the face of a clock, the top of an iron, and an enamelware pitcher near the bath house, a wooden zori in a garden feature on the east side, a milk glass toiletries jar with residue of its contents, and a large tin with Christmas decorations.

Conclusion

The Amache field school remains a highly successful collaborative project of research, teaching, preservation, and public engagement. New data gathered at Amache, as well as the management of museum collections, provides resources for better understanding, interpreting, and preserving this site of national and even international import. At each step, the project strives to incorporate diverse stakeholders, as well as robust methodologies. The synergy of community-engaged work is quite evident in this summary, as we know significantly more about the camp landscape because of memories, insight, and historic documents shared by the Amache community. We appreciate the hard work of all of our crew and staff, as well as the support of funding agencies. This project was funded in part by a State Historical Fund grant from History Colorado, student tuition, and generous individual donors. We thank them all.



Figure 9: The 2018 field crew of students, volunteers, interns, and staff pose in front of the recently relocated 11F Recreation Hall at the end of another successful season.